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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,247	12/14/2005	Hirokazu Ooe	2936-0241PUS1	5978

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EXAMINER	
CORMIER, DAVID G	
ART UNIT	PAPER NUMBER
4132	

NOTIFICATION DATE	DELIVERY MODE
10/30/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/535,247	OOE ET AL.	
	Examiner	Art Unit	
	DAVID CORMIER	4132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 May 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :20050518, 20051214, 20070808, 20071023, 20080118.

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "65". Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Inventorship

Claims 8-10 and 13-15 are directed to an invention not patentably distinct from Claims 1-4 of commonly assigned U.S. Patent Application No. 10/550002. Specifically,

claim 1 of 10/550002 claims a washing machine with an ion eluting means for eluting ions to water, a sensing means for sensing imbalance, and an imbalance correction means for correcting the imbalance. Claims 2-4 of 10/550002 claim the washer of Claim 1, wherein specific imbalance correction processes are carried out. As explained in further detail below in the double patenting rejections section, Claims 8-10 and 13-15 of 10/535247 are held to be obvious with respect to the conflicting application.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned U.S. Patent Application No. 10/550002, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

4. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

5. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 8-10 and 13-15 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 1-4 of copending Application No. 10/550002. Although the conflicting claims are not identical, they are not patentably distinct from each other because the structure implied in the claims of 10/535247 is claimed by 10/550002. The claims in 10/550,002 represent a subgenus of the claims in 10/535,247 since they are means plus function claims, and so they fully anticipate the implied structure of the claims in this application.

7. Regarding Claim 8, 10/535247 claims a washer where antimicrobial metal ions can be added, uneven spreading of laundry is detected, and a countermeasure is used to correct the imbalance. The structural elements which are not explicitly claimed, but would be necessary components of the apparatus, are an ion elution unit, sensor to detect imbalances, and a microprocessor to correct the imbalance. These elements are present in Claim 1 of 10/550002. Additionally Claim 1 of 10/550002 claims that the

countermeasure ("imbalance correction") is different when uneven spreading of laundry ("imbalance") is detected and when metal ions are not added, which is claimed by 10/535247.

8. Regarding Claim 9, 10/535247 claims that "the different countermeasure is rinsing for correcting uneven spreading of laundry by agitating it in water containing metal ions." Claim 2 of 10/550002 claims "the different imbalance-correction processing is balance correction rinsing in which the metal ion added water is supplied to the laundry tub and agitation is performed."

9. Regarding Claim 10, 10/535247 claims that when the rinsing for correcting imbalance occurs, "an amount of metal ions to be added is less than that added in previous processes." Claim 3 of 10/550002 claims to have a balance correction rinsing operation in which a smaller amount of metal ion added water is added than in a preceding operation. The washer of Claim 3 would supply fewer metal ions if, for instance, the concentration of the metal ions was the same as in the preceding operation. Claim 4 of 10/550002 claims to have a balance correction rinsing operation in which the water added contains a lower concentration of metal ions than in a preceding operation. The washer of Claim 4 would supply fewer metal ions if, for instance, the amount of water added was the same as in the preceding operation.

10. Regarding Claims 13-15, 10/535247 claims that when unbalances are detected there are different countermeasures adapted to correct the imbalances and that the kinds and/or order of countermeasures to be adapted are selectable. Claims 3 and 4 of 10/550002 each claim a different countermeasure used to correct an imbalance, where

the specific countermeasure is selected by the logic governing the imbalance correction means ("controller/microprocessor").

11. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Objections

12. Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 6 appears to be a rewording of the phrase "wherein the predetermined process...swirl period and a still period" of Claim 3.

Claim Rejections - 35 USC § 112

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

15. Regarding Claims 1-3 and 8, the phrase "metal ions can be added" renders the claim indefinite because it is unclear whether the limitations following the phrase are optional.

16. Regarding Claims 1-16, the claims present various process limitations relating to generating metal ions, agitation and swirl periods, indications and/or notification,

washing and rinsing, sensing imbalance, and performing countermeasures, among perhaps others. It is unclear whether these limitations characterize how the claimed washer is to be utilized irrespective of the structural parts that the claimed washer may possess itself, whether these limitations characterize structural parts that the claimed washer itself must be capable of performing with its own parts, or some other scope of coverage. Therefore, it is unclear what structural limitations must the claimed washer satisfy.

17. Regarding Claim 2, it is unclear what is signified by the quotation marks.

Claim Rejections - 35 USC § 102

18. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

19. Claims 1-7 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by *Ando et al* (JP 2001-276484).

20. Regarding Claim 1, *Ando et al* teaches a washing machine that sterilizes clothes (machine translation paragraphs 1-4). Claims 4 and 5 require a tub, and Claims 1-3, 6 and 7 can be broadly interpreted to include a tub, which is taught by *Ando et al* (Figure 1, part 103; machine translation paragraph 22). Claims 3-6 can be broadly interpreted to include an agitator, which is taught by *Ando et al* (Figure 1, part 104; machine translation paragraph 22). Claim 16 requires an ion elution unit that elutes metal ions by applying a voltage between electrodes, which is taught by *Ando et al* (machine

translation paragraph 4) as an ion elution unit (Figure 1 and 2, part B), which works by applying a voltage to electrodes (Figure 2, parts 121 and 122; machine translation paragraphs 22-25).

21. The use of the washing machine in Claims 1-7 is regarded as intended use of the washing apparatus as taught by *Ando et al* and is not further limiting in so far as the structure of the apparatus is concerned. The claimed intended use must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. The washer of *Ando et al* is capable of holding metal ions and water, of rinsing, and of agitating.

22. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by *Hird* (WO 01/71084 A2).

23. Regarding Claims 1 and 8, *Hird* teaches a washing machine for clothes (page 1, lines 1-8). Claims 4, 5 and 8 require a tub, and Claims 1-3, 6 and 7 can be broadly interpreted to include a tub, which is taught by *Hird* as a "drum" (Figure 1, part 50; page 3, line 29). Claims 8-13 can be broadly interpreted to include a sensor to detect imbalances, which is taught by *Hird* as a sensor that detects imbalances in laundry by monitoring the speed of the drum and the voltage applied to the motor (Figure 2, part T; page 6, lines 8-10). Claims 8-15 can be broadly interpreted to include a microprocessor and actuator, which is taught by *Hird* as a controller (Figure 2, part 100; page 6, lines 1-2) that operates according to control software (Figure 2, part 105; page 6, lines 1-2) and a motor to act as the actuator (Figure 2, part M; page 6, lines 8-13, 23-28). Claims 11 and 12 can be broadly interpreted to include a visual display, which is taught by *Hird* as

an LCD which is used to display progress of the machine during the wash cycle (Figure 2, part 125; page 6, lines 17-18). Claim 11 can be broadly interpreted to include a means for agitation, which is taught by *Hird* in that the drum is rotatably mounted (page 4, line 11); therefore it is capable of agitating laundry by rotating.

24. The use of the washing machine in Claims 8-15 is regarded as intended use of the washing apparatus as taught by *Hird* and is not further limiting in so far as the structure of the apparatus is concerned. The claimed intended use must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. The washer of *Hird* is capable of holding metal ions and water, of detecting uneven spreading of laundry, of rinsing, of providing a notification to the user, and of having the control software select different countermeasures. The washer of *Hird* is also capable of adapting different countermeasures for correcting spreading of laundry because the controller of *Hird* is capable of performing multiple rebalancing operations such as rotating the drum at a speed of 83 rpm (page 7, lines 15-16) and rotating the drum so that different segments of the drum rotate relatively to each other (page 8, lines 21-23).

Claim Rejections - 35 USC § 103

25. In the event that the anticipation rejection is not sufficient, and the intended use is given patentable weight, the following rejections are made to address the intended use.

26. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

27. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

28. Claims 1, 2 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Ando et al* (JP 2001-276484) in view of *Wada* (JP 06-269592).

29. Claim 1 is to a washer wherein antimicrobial metal ions can be added in to water and attached to a surface of laundry in a predetermined process in a laundry washing session; wherein a time of the predetermined process is longer when metal ions are added than when no metal ions are added.

30. Claim 2 is to the washer of Claim 1, wherein metal ions can be added into water being fed during "rinsing with pouring water."

31. Claim 16 is to the washer of Claim 1, wherein metal ions are generated by using an ion elution unit that elutes metal ions by applying a voltage between electrodes.

32. *Ando et al* discloses a washing machine that supplies metal ions to laundry in a rinse process (machine translation paragraph 4) as in Claims 1 and 2, where the metal

ions are supplied by an ion elution unit (Figure 1 and 2, part B), which works by applying a voltage to electrodes (Figure 2, parts 121 and 122; machine translation paragraphs 22-25) as in Claim 16.

33. *Ando et al* does not explicitly disclose that the process when the metal ions are added is longer than when metal ions are not added as in Claim 1.

34. *Wada* discloses a washing machine that can apply a finishing agent to laundry (machine translation abstract, paragraph 1), in which the time period while applying a finishing agent is longer than a time period in which no finishing agent is applied (machine translation paragraph 15) as in Claim 1. This is to allow the finishing agent more time to become fully adhered to the laundry (machine translation paragraph 15)

35. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the washer of *Ando et al*, as taught by *Wada*, and to have the time period for the application of metal ions ("finishing agent") to be longer than a time period when there are no metal ions supplied. One would have been motivated to do so in order to receive the expected benefit of allowing the ions more time to become fully adhered to the laundry.

36. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Ando et al* (JP 2001-276484) in view of *Fujii et al* (JP 3-97497).

37. Claim 3 is to the washer of Claim 1, wherein the predetermined process includes a powerful swirl period and a mild swirl period or a powerful swirl period and a still period.

38. *Ando et al* discloses a washing machine that supplies metal ions to laundry (machine translation paragraph 4).

39. *Ando et al* does not disclose using a powerful swirl period and a mild swirl period or a powerful swirl period and a still period.

40. *Fujii et al* discloses a washing machine where bleach is added, agitation is carried out continuously for a period of time ("powerful swirl period"), then agitation is done intermittently during the soaking period ("mild swirl period") (page 3). This is done to allow the bleach to effectively enter the surface of the clothes during the soaking period ("mild swirl period") (*Fujii et al*, page 3)

41. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the washer of *Ando et al*, as taught by *Fujii et al*, and to add ions to the laundry in a process that has a powerful swirl period and a mild swirl period. One would have been motivated to do so in order to receive the expected benefits of allowing the bleach to effectively enter the surface of the clothes during the soaking period ("mild swirl period").

Examiner's Note

40. A written translation of *Fujii et al* (JP 03-097497) has been ordered from Translations Branch.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID CORMIER whose telephone number is

(571)270-7386. The examiner can normally be reached on Monday - Thursday 7:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Lavilla can be reached on (571)272-1539. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DGC/

/Michael La Villa/
Michael La Villa
Supervisory Patent Examiner, Art Unit 4132
26 October 2008